

8 - 10 GHz, Low Noise Amplifier

General Description

The NLC00408 is a single supply low noise amplifier that is usable between 8.0 GHz and 10.0 GHz. A thin film hybrid MIC process is used to achieve robust characteristics over temperature range -30°C to +70°C. The amplifier incorporates internally protected voltage regulator, reverse polarity protection and can be biased in a wide range of DC voltage. Both input and output RF connectors are field replaceable SMA-F connectors.



Performance at 25°C

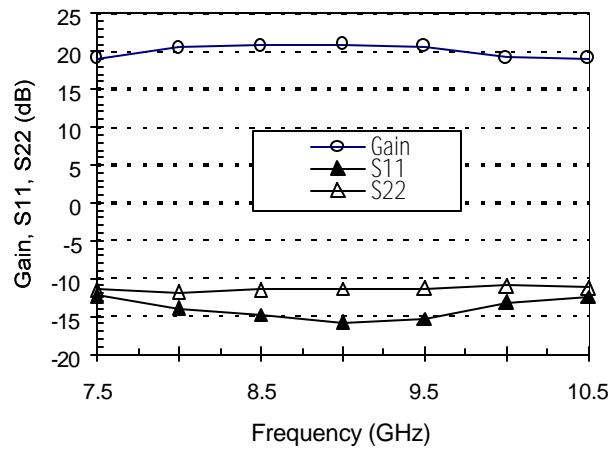
Parameter	Min.	Typ.	Max.	Units
Frequency	8		10	GHz
Gain	17	19		dB
Gain Flatness over all frequency range			± 0.7	dB
Noise Figure		2.4	3.0	dB
1 dB Compression Point	12.0	13		dBm
Input VSWR		2.0 : 1		
Output VSWR		2.0 : 1		
DC supply voltage (Vcc)	+10	+15	+17	V
Supplied Current		50	70	mA

Customized Designs: For custom designs, including both electrical and mechanical, please contact us at sales@nextec-rf.com.

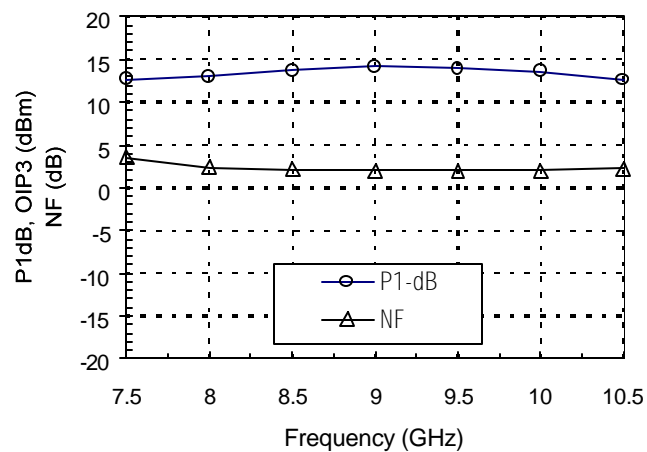
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Test Data¹

Gain and Return Losses at 25 degC



P1-dB, Output IP3 and Noise Figure at 25 degC

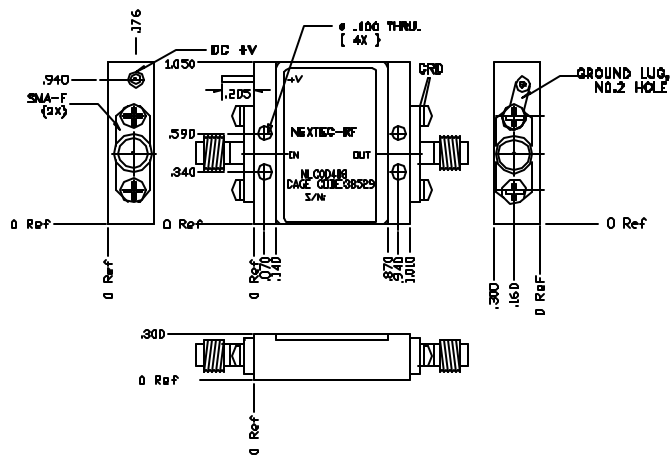


¹ This test data is a result from test of a typical unit, not statistically manipulated.

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Outline Drawing



(unit: inch)

Connector Description

RFin	RF input signal (replaceable SMA-F)
RFout	RF output signal (replaceable SMA-F)
DC Supply Voltage	10 to 17 Volts

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